

NPCAP™-PXJ Series

- Super low ESR and high heat resistance have been obtained by using conductive polymer as electrolyte.
- Rated voltage range : 2.5 to 25V_{dc}, Capacitance : 82 to 820μF
- Case size : φ 6.3×7.7L
- Suitable for DC-DC converters, voltage regulators and decoupling applications used on computer motherboards etc.
- Solvent resistant type
- RoHS Compliant
- Halogen Free



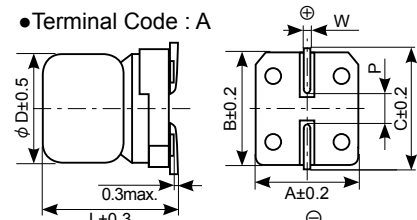
◆ SPECIFICATIONS

Items	Characteristics										
Category											
Temperature Range	-55 to +105°C										
Rated Voltage Range	2.5 to 25V _{dc}										
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)										
Surge Voltage	Rated voltage×1.15 (at 105°C)										
Leakage Current	Shall not exceed values shown in STANDARD RATINGS. (at 20°C after 2 minutes)										
Dissipation Factor (tan δ)	0.12 max. (at 20°C, 120Hz)										
Low Temperature Characteristics (Max. Impedance Ratio)	Z(-25°C) / Z(+20°C) ≤ 1.15 Z(-55°C) / Z(+20°C) ≤ 1.25 (at 100kHz)										
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 15,000 hours at 105°C .										
	<table border="1"> <tr> <td>Appearance</td> <td>No significant damage</td> </tr> <tr> <td>Capacitance change</td> <td>≤ ±20% of the initial value</td> </tr> <tr> <td>DF (tan δ)</td> <td>≤ 150% of the initial specified value</td> </tr> <tr> <td>ESR</td> <td>≤ 150% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤ The initial specified value</td> </tr> </table>	Appearance	No significant damage	Capacitance change	≤ ±20% of the initial value	DF (tan δ)	≤ 150% of the initial specified value	ESR	≤ 150% of the initial specified value	Leakage current	≤ The initial specified value
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DF (tan δ)	≤ 150% of the initial specified value										
ESR	≤ 150% of the initial specified value										
Leakage current	≤ The initial specified value										
Bias Humidity	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them to the DC rated voltage at 60°C, 90 to 95% RH for 1,000 hours.										
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DF (tan δ)	≤ 150% of the initial specified value										
ESR	≤ 150% of the initial specified value										
Leakage current	≤ The initial specified value										
Surge Voltage	The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltage specified at 105°C for 30 seconds through a protective resistor(R=1kΩ)and discharge for 5 minutes 30 seconds.										
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DF (tan δ)	≤ 150% of the initial specified value										
ESR	≤ 150% of the initial specified value										
Leakage current	≤ The initial specified value										
Failure Rate	0.5% per 1,000 hours maximum (Confidence level 60% at 105°C)										

*Note : If any doubt arises, measure the leakage current after the following voltage treatment.
Voltage treatment : DC rated voltage is applied to the capacitors for 120 minutes at 105°C .

◆ DIMENSIONS [mm]

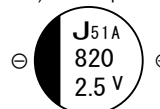
- Terminal Code : A



Size Code	φ D	L	A	B	C	W	P
F80	6.3	7.7	6.6	6.6	7.2	0.5 to 0.8	1.9

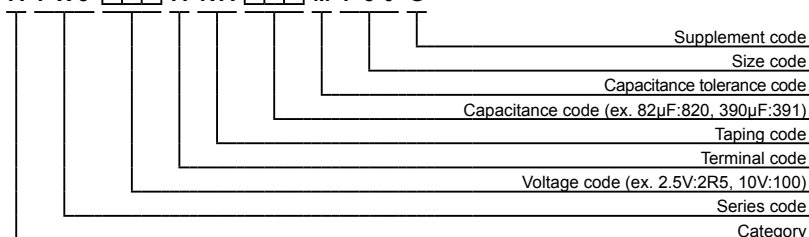
◆ MARKING

EX) 2.5V820μF



◆ PART NUMBERING SYSTEM

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
A P X J [] [] A R A [] [] M F 8 0 G



Specifications in this bulletin are subject to change without notice.

NPCAP™-PXJ Series

◆ **STANDARD RATINGS**

WV (V _{dc})	Cap (μF)	Size code	Leakage current (μA max/ after 2min.)	ESR (mΩmax/20°C , 100k to 300kHz)	Rated ripple current (mA _{rms} / 105°C , 100kHz)	Part No.
2.5	820	F80	1,020	7	5,000	APXJ2R5ARA821MF80G
6.3	560	F80	1,760	8	5,000	APXJ6R3ARA561MF80G
10	390	F80	1,950	13	4,460	APXJ100ARA391MF80G
16	270	F80	864	13	4,460	APXJ160ARA271MF80G
20	150	F80	600	18	3,790	APXJ200ARA151MF80G
25	82	F80	410	28	3,040	APXJ250ARA820MF80G